







The Paleontologist's Path: Discovering Florissant Fossils

K-3

Activities:

-  Fossil Identification and Cataloging
-  Fossil Plants from the Florissant Formation: Paleobotany

Materials Included

-  Fossil ID Packet
-  Other Background Material
-  Bingo Call card
-  Bingo Playing cards
-  Concentration cards
-  Paper Fossils

State Science Standards:

3.1 - Students know and understand the characteristic of living things, the diversity of life, and how living things interact with each other and with their environment.

Students know and are able to distinguish living from nonliving things.

3.4 - Students know and understand how organisms change over time in terms of biological evolution and genetics.

Students can describe examples of extinct organisms based on fossil evidence.

4.1 - Students know and understand the composition of Earth, its history, and the natural processes that shape it.

Students can describe different types and uses of Earth materials.

Students recognize that fossils are evidence of past life.

Students can identify major features of Earth's surface (volcano, mountains, lakes).

State Math Standards:

2.1 - Students use algebraic methods to explore, model, and describe patterns and functions involving numbers, shapes, data, and graphs in problem-solving situations and communicate the reasoning used in solving these problems.

Students will identify, describe, and analyze a wide variety of patterns in shape.

5.1 - Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.

Students understand and apply the attribute of length, perimeter, area and angle measurement in problem-solving situations.

Students select appropriate units, including metric and U.S. customary, and tools to measure to the degree of accuracy required to solve a given problem.

Activity One: Fossil Identification

Materials:

- ✚ Paper Fossils
- ✚ Fossil ID Packet
- ✚ Cataloging Sheet

Skills:

- ✚ This activity is designed to sharpen the visual skills needed to classify fossil plants.
- ✚ Students learn to research materials and use available information.

Directions:

- ✚ Xerox off additional **Paper Fossils** and cut out each fossil picture, allow each student to have two paper fossils.
- ✚ Have the students assign a number to each of their paper fossils. They are the cataloger and can choose any number they want.
- ✚ Xerox 4-5 additional **Fossil ID Packet** (black and white is fine) and have students work in groups of 4-5 sharing the **Fossil ID Packets** and helping each other identify their paper fossil on the worksheet.

Activity one: Fossil Identification

Name _____

Partners _____

Fossil # _____

Common name _____




Fossil # _____

Common Name _____

Before Activity Two and Three: use the bingo call card as flash card and have the students read the name out loud as a group to help them become familiar with the pictures.

Activity Two: Fossil Bingo

Materials:

-  **Bingo cards**
-  **Bingo call cards**
-  **Beans or Markers**

Skills

Students learn to identify fossils and organize like objects.

Play bingo according to the usual rules. Have students place beans or some small markers on their **Bingo card** pictures to show a match with the **Bingo call cards** the teacher flashes to the students.




If they get bingo, they must name all the fossils they have covered to win.
Example: if they have covered a redwood on their card, they must say it is the "redwood".

Activity Three

Materials:

-  **Concentration cards**

Directions:

-  Put construction paper on the back and number card 1 through 12
-  Line up cards on the floor in 3 rows, have students sit in a semi-circle around the cards
-  Have one student be in-charge turning over the cards during the game

Break students into 2 teams.

Play according to the usual concentration rules. Set up 2 teams.

The first team calls the numbers of 2 cards, if the cards match they can choose two more cards. If they do not match, the second team chooses two cards, and if they do not match the turn goes back to the first team.

As the students try to make a match have them say the name of the fossil.

1st team to turn over the most pairs is the winner.

Activity Four: Cataloging

Preparation

Students should understand how to use a ruler and be able to measure objects.

Materials

- ✚ Xerox off one catalog sheet per student
- ✚ Use Xeroxed ID Packets
- ✚ Paper Fossils used in activity one
- ✚ Students need a ruler and a pencil

Skills

Students learn to identify an object, catalog scientific data, measure and describe that data.

Have students select one of their fossils from Activity One.

Using the catalog sheet have them first:

- ✚ put the name of the fossil and the number on the sheet.
- ✚ identify the school as the place they found it.
- ✚ put the date discovered.

Then have the students in the next space provided:

- ✚ draw a line that indicates how long their fossil is.
- ✚ draw a line to show how wide it is.

Finally using their new measurements, have them draw a picture in the grid of their fossil within the proportions of their measurements.

Post Activity

Activity Five

Have students repeat Activity Four using the real fossil they found at the Florissant Fossil Quarry.

K-3 Catalog Sheet

Name of fossil _____ Date _____

Number of Fossil_____

Place Fossil was found _____

Cataloger (Name of Student)_____

Measure in inches and draw a line below that indicates how long the fossil is.

Measure in inches and draw a line below that indicates wide the fossil is.

Draw a picture of your fossil in the grid.

[illegible]